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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,539	02/17/2004	Casey Chung	011687.00036	2451
22908	7590	11/17/2006	EXAMINER	
BANNER & WITCOFF, LTD. TEN SOUTH WACKER DRIVE SUITE 3000 CHICAGO, IL 60606			REHM, ADAM C	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,539	CHUNG, CASEY	
	Examiner	Art Unit	
	Adam C. Rehm	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-14 and 16-33 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: instances of misuse of the phrase "decreasing block light" remain. This is not grammatically correct.

Applicant should inspect the claims for all such errors and correct. Appropriate correction is required.

2. Claim 20 is objected to because of the following informalities: instances of misuse of the term "then" remain. The usage is incorrect and should be replaced with "than" to denote contrast as opposed to a unit of time or consequence. Applicant should inspect the claims for all such errors and correct. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-5, 8-13, 20-22 and 29-33 are rejected under 35 U.S.C. 102(b) as being anticipated by ENTROP ET AL. (US 6,250,772), which discloses:

- A T-5 light source mountable within the thickness of a light fixture and including opposed longitudinal ends defining a longitudinal axis and a vertical plane transverse/orthogonal to the axis (4/5, Figs. 1 and 2);

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- A light shield mounted to the fixture (72) comprising a center (II, Fig. 1) located on a 180 degree axis (4/5/II, extending straight up) and parallel to a longitudinal axis wherein a percentage of light passes (4, centerline, Fig. 2);
- A first side having an outer edge (one side from the center (II) to an outer edge), a first path (2) and a first plurality of coverage zones (6 and 72 divide light paths into square sections, Figs. 1 and 2);
- A second side having an outer edge (one side from the center (II) to an outer edge of the fixture), a second path (2) and a second plurality of coverage zones (6 and 72 divide light paths into square sections, Figs. 1 and 2);
- Wherein each coverage zone has a light blocking area that blocks an amount of light (the side of 6 nearest the light has a width capable of blocking an amount of light; Fig. 1 below, Refs. D, E and F wherein Ref. D is illustrates no light blockage, Ref. E illustrates 66 percent light blockage; and Ref. F illustrates a linear path from (II) of blocked to unblocked light);
- Wherein the first plurality of coverage zones extend from the center to the first outer edges along the first path (Fig. 1 illustrates the coverage zones extending from the center (II) to the outer edge);
- Wherein the second plurality of coverage zones extend from the center to the second outer edges along the first path (Fig. 1 illustrates the coverage zones extending from the center (II) to the outer edge);

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- Wherein the plurality of light blocking areas on the first side decreasingly block light along the first and second paths (72/74 prevents direct downward radiation, but increasingly allows radiation moving toward the outer edges and as the second light source becomes visible past 74; Fig. 1 below, Refs. D, E and F);
- Wherein the light emitted within the vertical plane increases from a first positive light quantity in a first angle perpendicular from the longitudinal axis to a maximum light quantity in a second angle displaced from the first angle (72/74 prevents direct downward radiation, but increasingly allows radiation moving toward the outer edges and as the second light source becomes visible past 74);
- Wherein the light blocking area is linear/provides a linear change in the percentage of light shielding/blocking along the first and second paths (6 blocks light and runs linear from the center (II) to the outer edge, Figs. 1 below, Refs. D, E and F; Fig. 2);
- Wherein the first path is an inner aperture (2) having first a first slope (74) configured to decrease the amount of light blocked along the first path (Ref. F illustrates a decrease in the amount of light blocked moving away from slope the left side of 74) and a second slope configured to increase the amount of light blocked moving toward the right side of 74 and along F);
- Wherein the light shield comprises an outer aperture (2);

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- A zone boundary located on the light shield between the center and the outer edge, wherein the first coverage zone is located between the center and the boundary and a second coverage zone is located between the boundary and outer edge, wherein the light blocking area of the first coverage zone is greater than the light blocking area of the second coverage zone, which linearly approaches/is zero light-blocking coverage (Ref. A below illustrates a zone boundary between two zones (B and C) wherein more light is blocked in the first zone relative to the second);
- A first angle displaced from the perpendicular angle providing more than/at least 60 degrees (α , Fig. 1); and
- A second angle acts to limit light to less than 35 percent of the maximum (Ref. E, Fig. 1 below shows 33 percent of light to pass).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over ENTROP ET AL. (US 6,250,772) and CASTEEL (US 5,743,627). ENTROP discloses the claimed invention, but does not disclose a light fixture with a maximum width of 1.5-inches. However, CASTEEL teaches using a light fixture of a thickness of less than 1.5 inches (Column 3, Lines 13-17) for the purpose of providing a fixture with increased

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utility (Column 1, Lines 8-18). It would have been obvious to one of ordinary skill in the art at the time of invention to modify ENTROP and use the low-profile fixture as taught by CASTEEL in order to provide a fixture with increased utility. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of invention to design the ENTROP fixture with a maximum width of 1.5 inches in order to accommodate low ceilings, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

5. Claims 3, 6-7, 10, 14, 16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over ENTROP ET AL. (US 6,250,772) as applied to claims 1, 20, 23 and 29 above, and further in view of YONKERS (US 4,516,197). ENTROP discloses the claimed invention including a plurality of apertures (2) providing a linear decrease along a path of amount of light blocked (72/74 prevents direct downward radiation, but increasingly allows radiation moving toward the outer edges and as the second light source becomes visible past 74), but does not disclose:

- A saw-tooth pattern on first and second sides (Claim 3 and 14);
- An inner aperture having a truncated diamond shape (Claim 6);
- An inner aperture having five edges (Claim 7);
- An inner aperture with an edge having first and second slopes (Claim 10);
- and
- Inner and outer nonsymmetrical apertures (Claims 16, 18 and 19).

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6. However, Yonkers teaches an antiglare panel having a saw tooth pattern (Fig. 4); inner and outer apertures that are saw toothed and having a truncated diamond shape with five edges (Figs. 1, 2 and 4) for the purpose of reducing glare (Column 1, Lines 4-9). It would have been obvious to one of ordinary skill in the art at the time of invention to modify ENTROP and use the antiglare panel as taught by YONKERS in order to reduce glare of the ENTROP fixture.

Response to Amendment

7. Applicant's amendment filed 10/19/2006 has been received.

8. The objections to the drawings and claims are withdrawn.

Response to Arguments

9. Applicant's arguments have been fully considered but are not entirely persuasive.

10. It appears as though Applicant has misread the office action. Examiner stated in the Advisory Action, pg 2, that "Applicant forwards the following arguments: (1) ENTROP fails..."

11. Applicant asserts that ENTROP's abrupt change in the amount of light blocked renders the claimed invention distinguishable from ENTROP. Given the claim language is silent with respect to whether the change of percent light blocked, i.e. abrupt versus gradual, and because at certain points along the linear path of ENTROP, there is a decrease in light from one point to the next, it is Examiner's position that ENTROP is commensurate with the current state of the claims. While Examiner appreciates the asserted differences between ENTROP and the claimed invention, it is imperative that Applicant recite these features in the claims. Claims are interpreted in light of the

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specification, but limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

12. Applicant asserts that Claim 5 is distinct because ENTROP does not disclose an inner aperture. However, Applicant acknowledges that ENTROP may disclose an outer aperture. Examiner respectfully contends that on the opposite side of the outer aperture is an inner aperture located within the unit (Figs. 1 and 2).

13. Applicant argues the claimed language "saw-tooth pattern" per Claim 14 and "coverage area less than 90 percent" per Claim 15. Examiner concurs and has moved the rejection of Claims 14 from a 102 to a 103 and has determined Claim 15 to contain allowable subject matter given the art of record.

14. Applicant asserts that ENTROP does not disclose three equally sized coverage areas with each shielding a difference percentage of light. Examiner respectfully submits that ENTROP does disclose such.

15. Applicant's arguments regarding Claims 30-33 are unclear. Applicant repeats the above argument, i.e. linear change and percent shielding, and then acknowledges ENTROP discloses linear change and amount of light emitted. The two points seem analogous. Examiner is unable to respond.

16. Applicant asserts that since CASTEEL's dimensions are 1.7 inches as opposed to Applicant's claimed 1.5 inches, the claimed invention is patentably distinct. Examiner respectfully disagrees. Applicant first argues that the combination of the references is fatal since the two light sources have different functions. It is a well-known trend to design devices that utilize cheaper material, weight less and have a smaller profile in

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order to yield devices with increased applications. However, in order to avoid conclusory statements with recognition of CAFC instructions that assumptions about common sense cannot substitute for evidence thereof, as acknowledged by Applicant, CASTEEL is provided to precisely illustrate the motivation to decrease size (Column 1, Lines 8-18). Merely claiming a different/smaller size of existing elements of a prior art reference does not yield a patentably new device, especially when motivation for a smaller size is disclosed in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

17. Applicant argues that the reflectors of ENTROP and YONKERS operate in substantially different ways and that ENTROP cannot be modified to utilize the reflector of YONKERS. Examiner respectfully disagrees. Both reflectors provide the exact same function, but are shaped differently (as provided above). YONKERS is provided to illustrate that it is known to reshape reflectors in order to reduce glare. It is Examiner's position that the ENTROP reflectors (6 and 2) running perpendicular to each other (Figs. 1 and 2) are analogous to the YONKERS reflector and could easily be reshaped in a saw-tooth pattern as taught by YONKERS.

Allowable Subject Matter

18. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. The following is a statement of reasons for the indication of allowable subject matter: no prior art of record discloses or otherwise suggests a lighting apparatus as claimed with emphasis on "...a first path and a first plurality of coverage zones... a

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second path and a second plurality of coverage zones wherein each coverage zone has a light blocking area...[that] decreasingly block light along the...path...wherein measurable coverage area at the center is less then [sic] 90 percent."

Conclusion/Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ACR
11/6/2006



**THOMAS M. SEMBER
PRIMARY EXAMINER**